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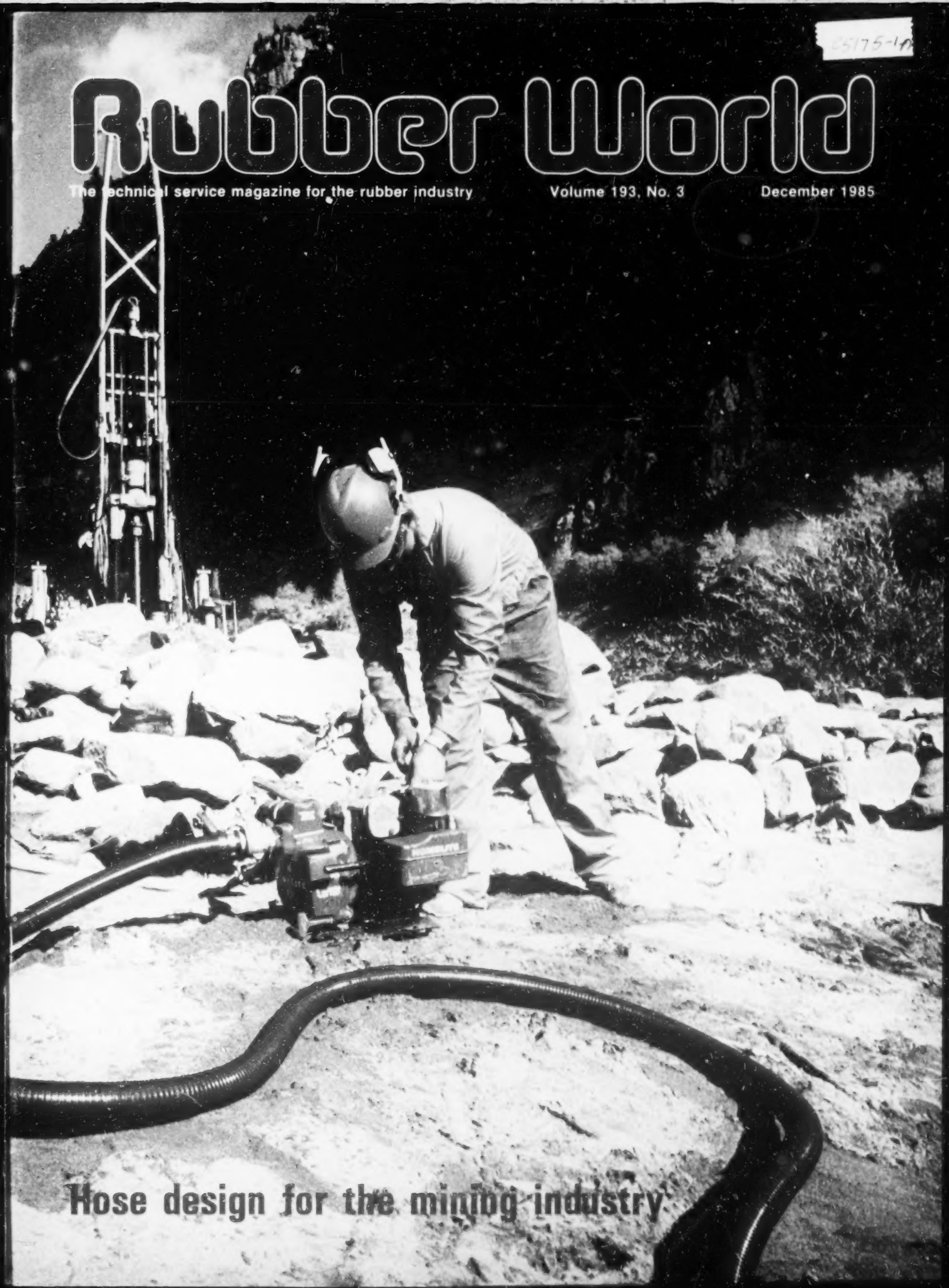
Rubber World

The technical service magazine for the rubber industry

Volume 193, No. 3 December 1985



Hose design for the mining industry

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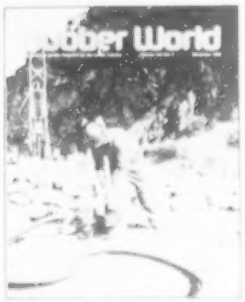

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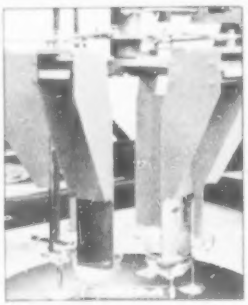

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Cover photo courtesy of Gates Rubber Co.

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ABC

Business Briefs

Acquisitions, expansions

Goodyear has agreed in principle to purchase **Long Mile Rubber** and **AMF Tire Equipment** from **Minstar, Inc.** Long Mile, of Dallas, TX, is the largest full-line tread rubber producer in the U.S. AMF Tire Equipment, based in Buena Park, CA, is now a subsidiary of Mic Tire Equipment (TEI), a wholly owned subsidiary of Minstar. Current management of Long Mile and TEI will operate the units as independent subsidiaries under Goodyear's Tire Division. Long Mile has about 550 employees; TEI has approximately 200 workers in its worldwide operations. Goodyear's purchase of the two companies is expected to be completed by the end of this year. The acquisition is subject to government approval.

Blasius Industries has completed and closed the sale of certain assets of its **Heil Grinding Division** located in Rochester, NY. Inventories, customer orders and the on-going business has been sold to **Heil Grinding and Manufacturing**, a newly formed corporation, for consideration, principally, consisting of a cash payment of $53,000, and the assumption of trade payables totalling $180,000. Machinery and equipment of the Division was sold for $281,485 in cash to **Glasgow, Inc.** Heil Grinding and Manufacturing will lease such machinery and equipment from Glasgow and operate at the Rochester, NY facility utilized by the former Division.

Mace Adhesives and Coatings has announced the completion of its production and R&D facilities, adding more than 10,900 square feet of space. The company's manufacturing capacity has been increased more than 100% by the addition of four reactor kettles. The company has also constructed a separate quality control laboratory next to its manufacturing facility. Mace's R&D laboratory has been doubled in working space and new equipment has been purchased.

Cooper Tire and Rubber has entered into a letter of intent to acquire **North American Rubber** and **Rio Grande SerVass, S.A. de C.V.** Both of these companies were established to continue the inner tube business of the **Indianapolis Rubber Company**.

Borg-Warner Chemicals announced it will build a thermoplastics facility at Shelbyville, KY to compound Cycolac brand ABS and Prevex brand engineering polymer.

Leland-Gifford of Akron, OH has purchased the cartridge screen changing product line, developed for use on thermoplastic extruders, of **Heston Products**.

Columbia Cement of Freeport, NY has completed a $2 million plant expansion that will provide an additional four million gallon annual capacity.

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RMA rubber report through October 1985 (figures in metric tons)

	Cumulative 1985	Cumulative 1984	% Change 85 vs 84
New Rubber			
New rubber available	2,004,811	2,137,971	−6.23
Imports	729,061	701,466	3.94
Exports	244,460	257,730	−5.15
Apparent Consumption	1,744,581	1,854,219	−5.91
Natural Rubber			
Imports	541,898	540,566	.25
Exports	26,424	19,351	36.55
Apparent Consumption	517,858	519,280	−.27
% Total new rubber	29.68	28.00	
Synthetic Rubber			
Production	1,276,730	1,436,505	−11.19
Imports	187,183	160,900	16.33
Exports	218,036	238,379	−8.53
Apparent Consumption	1,226,723	1,334,938	−8.11
% Total new rubber	70.31	71.99	
SBR			
Production	547,356	650,785	−15.89
Imports	64,995	48,837	33.09
Exports	54,917	72,956	−24.73
Apparent Consumption	567,749	614,804	−7.65
Nitrile			
Production	39,682	43,692	−9.22
Imports	8,096	7,935	2.03
Exports	4,447	5,346	−16.82
Apparent Consumption	41,421	44,397	−6.70
Polybutadiene			
Production	233,255	247,460	−5.74
Imports	48,314	44,659	8.18
Exports	16,416	15,699	4.57
Apparent Consumption	266,203	274,140	−2.89
Ethylene-Propylene			
Production	151,876	149,446	1.63
Imports	629	700	−10.71
Exports	24,343	24,077	1.10
Apparent Consumption	122,546	117,030	4.71
Butyl, Polychloroprene, Polyisoprene, Silicone and other Synthetic Elastomers			
Production	303,581	345,121	−12.04
Imports	65,153	58,769	10.86
Exports	117,913	120,301	−1.99
Apparent Consumption	238,802	284,564	−16.08

Business Briefs

Parker Hannifin recently acquired from **Scovill** substantially all of the operations of its **Schrader Bellows** subsidiary, a worldwide producer of pneumatic products and automation systems. Parker paid $63.4 million in cash, and will subsequently pay approximately $14.1 million upon its acquisition of Schrader's remaining foreign operations.

Ingersoll-Rand has purchased the **Fafnir Bearing Division** of **Textron**, and has merged the ball bearing manufacturer into **The Torrington Company**, a wholly owned subsidiary.

Sealed Air has announced the formation of **Static Inc.**, a **Sealed Air Company**, to support the corporation's static control and clean room environment product lines.

Imperial Chemical Industries Plc (ICI) and the French company **Shell Chimie** are having discussions with a view to a new subsidiary company of Shell Chimie, **Societe du Polyethylene de Fos (SPF)**, acquiring the ICI low density polyethylene business based on its 100,000 t/a manufacturing facilities at Fos in the south of France.

Financial statements

American Biltrite reported net earnings of $674,000 on sales of $23.8 million for the third quarter.

Cabot reported fourth quarter net income of $143.5 million on net sales of $349.2 million.

Net earnings of **Crompton & Knowles** in the third quarter were $1.75 million on sales of $56.6 million.

Essex Chemical reported a net income of $1.4 million on net sales of $46 million.

Exxon's third quarter net income was $995 million and revenue for the quarter totalled $22.3 billion.

BF Goodrich reported a third quarter income of $800,000 on sales of $834.9 million.

Jones & Vining announced net earnings for the third quarter were $507,000 on sales of $9.9 million.

Revenues for the third quarter for **Lubrizol** were $203.3 million. Net income for the quarter was $13.6 million.

Parker Hannifin reported net income of $84.1 million on net sales of $1.45 billion for 1985.

Park-Ohio reported net income of $473,000 on net sales of $37.5 million for the third quarter.

Shell Oil's third quarter earnings were $365 million. Revenues were $5.1 billion for the quarter.

Standard Products reported first quarter earnings were $5.1 million on sales of $92.5 million.

Sybron reported earnings of $2.7 million for the third quarter on sales of $128.2 million.

Contracts, licenses

Parlon Chemical of White Plains, NY announced that **Chemcentral Corp.** of Chicago, IL has been appointed the exclusive nation-wide distributor of the Parlon line of chlorinated rubber. Parlon Chemical acquired the Parlon line from **Hercules** of Wilmington, DE in early 1985, and is the only U.S. producer of chlorinated rubber.

D.A. Paulin, Inc. will be the exclusive sales agent for the New England area of **Wyrough and Loser's** line of products, including Poly Dispersion, Bar Form products such as Scorchguard "O" and Zic Stick '85; Promol products, Wyfire products, and Thiocure BR.

Tiros Plastics Products Division of Yonkers, NY has been named marketing specialist by **Shell Chemical** for the Shell Elexar Rubber product line.

RMA tire shipments & production report through October 1985 (figures in thousands of units)

Passenger Tires	1985	1984	% Change
Shipments			
Original Equipment	41,706	38,198	+9.27
Radial	34,747	31,925	+8.84
Replacement	109,043	109,440	-.3.10
Radial	85,529	81,962	+4.11
Export	4,803	4,482	+15.15
Radial	3,002	3,536	+10.01
Total	151,561	152,090	-0.35
Radial	123,278	117,423	+4.95
Production	123,765	130,563	-5.21
Radial	98,594	98,468	+0.09
Truck & Bus Tires			
Shipments			
Original Equipment	3,877	3,905	-0.47
Radial	3,673	3,047	+20.51
Replacement	23,772	23,526	+1.04
Radial	10,209	8,585	+24.73
Export	1,006	1,002	+0.40
Radial	529	462	+14.50
Total	30,655	30,435	+0.72
Radial	14,410	11,694	+23.23
Production	26,598	27,348	-2.89
Radial	12,198	10,422	+19.75

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Business Briefs

Markets, news

Workers at **Uniroyal Chemical** voted to attempt a buyout of the division after the company announced the chemical company was up for sale. Uniroyal announced its intentions to sell the chemical division to finance the leveraged buyout by top management after restructuring the company into five operating subsidiaries. The other four are Uniroyal Tire, Uniroyal Power Transmission, Uniroyal Plastics and Uniroyal Properties.

GenCorp, in a series of restructuring moves announced it would close its bias-tire manufacturing plant in Waco, TX. Production at the plant is scheduled to end late in spring. It currently employs 1,169 hourly and 236 salaried employees. It was General Tire's oldest tire plant and only all bias plant.

Armstrong Rubber cancelled its previously announced closure of its Hanford, CA tire manufacturing plant in response to an endorsement and approval by the United Rubber Workers International of contract changes. The plant produces automobile passenger and light truck radials for the replacement market.

Goodyear ended production at its Akron, OH Chemical Department, laying off 65 hourly and 28 salaried employees. The company will go to the open market and/or other Goodyear chemical facilities for its accelerators and antioxidants. The company also announced that 48 skilled trades employees will be laid off in line with reduced requirements throughout the Akron manufacturing complex.

The U.S. Federal Trade Commission dropped its investigation of U.S. tire companies that stemmed from claims of dumping of tires in the U.S. by Korea. BFGoodrich, Goodyear, Firestone, Armstrong and Cooper filed dumping charges in January with the International Trade Commission. The ITC was investigating whether the U.S. companies were in violation of antitrust laws in fighting the Korean tires entering the domestic market.

A study by Gabris International shows wire and cable consumption of polymeric materials for jackets, insulation and other uses will remain virtually constant through 1990. Demand in most wire and cable market segments especially fiberoptics, flat and ribbon, automotive, control and signal will show substantial growth during the period, but these increases will be offset by major declines expected in conventional communications and building wire and cable. Major opportunities in materials substitution composite construction and blended products exist. PVC, neoprene, chlorosulfonated polyethylene, SBR and LDPE materials will lose significant share. Gains will be achieved by XLPE(cross-linked), irradiated PVC, nylon, fluoroplastics, silicones, CPE, EPDM and various thermoplastic elastomers. The study shows imports could account for 7.7% of the market by 1990.

Polysar Inc. presented the University of Akron a gift of $50,000 for its polymer research center. The gift pushes to $6.8 million the amount raised, with $5 million coming from the state of Ohio. Construction of the first stage of the center will begin in the spring with the entire project to be completed in early 1988.

Rubber City Machinery produced and donated a specially designed mill to be used for work on artificial heart components at the cardiovascular lab at Akron University's Institute for Biomedical Engineering Research.

According to the U.S. International Trade Commission, production of rubber processing chemicals in 1984 dropped 2% from 1983 to 288 million pounds. Sales were of 276 million pounds, valued at $287 million. The production of cyclic rubber processing chemicals increased 6% during the year to 260 million pounds. Of the total production of cyclics, antioxidants, antiozonants and stabilizers accounted for 62% and accelerators, activators and vulcanizing agents 34%. Production of antioxidants, antiozonants and stabilizers amounted to 161 million pounds, which included 98 million pounds of amino compounds and 63 million pounds of phenolic and phosphite compounds. Production of acyclic chemicals amounted to 28 million pounds, a 40% decline from 1983. Dithiocarbamic acid derivatives accounted for 20% of the production of acyclics.

A report from the Malaysian Rubber Research and Development Board shows a slackening in rubber consumption for the first quarter of 1985 despite a 3.7% increase in natural rubber consumption. Consumption of all rubber was up 1.2% to 3.3 million tons. Natural rubber accounted for 1.1 million tons of that figure. Estimated natural rubber production for the first six months of 1985 show a 5.6% increase with Thailand increasing production by more than 28%. Malaysia was the top producer at 355,000 tons followed by Indonesia's 275,000 tons.

Estimated consumption of polymeric materials — wire and cable United States and Western Europe — 1985-1990 (Million Pounds)

	United States		Western Europe	
Material type	1985	1990	1985	1990
All thermoplastics	1,257	1,222	908	899
All thermoset elastomers	131.6	137.0	129.7	144.0
All thermoplastic elastomers	27.9	31.0	10.2	21.7
Totals (million pounds)	1,416.5	1,390.0	1,047.9	1,064.7
(metric tons)	641,333	630,673	475,453	483,076

Source: Gabris International

World rubber consumption, first quarter 1985

	NR + SR		NR	
	'000 tonnes	% change	'000 tonnes	% change
USA	714.3	— 4.4	229.4	+ 7.1
China	160.5	+ 6.3	102.5	+ 2.5
Japan	362.0	+ 2.5	133.4	+ 3.3
West Germany	150.7	— 7.9	51.3	— 2.8
France	114.7	—12.1	42.5	—10.1
UK	98.0	+ 1.0	31.0	+ 0.0
Italy	104.9	+ 6.5	33.7	+ 7.0
Eastern Europe	770.0	+ 5.5	97.5	+ 0.0
South Korea	72.8	+ 1.0	39.3	+14.2
Brazil	81.0	+11.3	24.1	+21.2
India	73.9	+ 8.8	58.3	+ 9.6
Canada	82.0	+ 7.9	27.5	+10.0
Others	58.0	— 5.3	254.5	+ 0.0
Total	3,365.0	+ 1.2	1,125.0	+ 3.7

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Rubber World

The technical service magazine for the rubber industry Volume 193, No. 4 January 1986

Technical Service

Independent test labs: industry's problem solvers

GM's early supplier program

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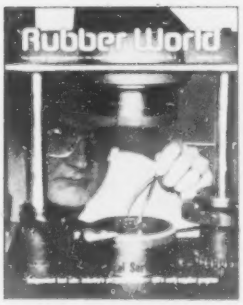

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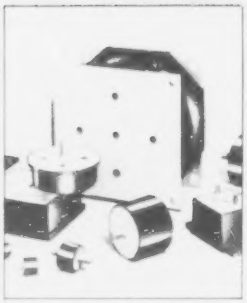

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Cover photo courtesy of Monsanto Instruments & Equipment

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Business Briefs

Acquisitions, expansions

The **Geneva Rubber Co.**, Geneva, OH has been purchased from Robin Industries by Donald P. Reiter. Geneva manufactures custom rubber products primarily for the automotive, trucking, off-highway OEM equipment, and industrial industries.

Gooding Rubber, Pittsburgh, PA, purchased the **Richmond Rubber Co.**, a Kelly Springfield division. Richmond is a distributor of industrial rubber products.

Du Pont plans to construct another plant at its Maydown, Northern Ireland site to produce Kevlar aramid fiber. The $60 million facility will have an annual capacity of 15 million pounds.

Conap, Inc., Olean, NY acquired **D Aircraft Products**, Anaheim, CA a manufacturer of silicone resin systems, silicone rubber extrusions and sheets, a bagging system for composite manufacturing, adhesives, chemical milling products and primers.

Mitsubishi Heavy Industries completed the world's largest tire plant for manufacturing giant-sized tires for Techmashimport, USSR in Bobruisk with the process engineering assistance of Toyo Rubber.

BFGoodrich will establish a new plant at Norwood, NC to manufacture aircraft tires. About 300 persons will be employed when the 300,000 sq. ft. facility is completed and in full operation. BFG also announced that BFG Canada purchased a PVC manufacturing plant at Fort Saskatchewan, Alta. from **Diamond Shamrock** and **NOVA** and the sale of BFG's Convent, LA chlorine, caustic soda and ethylene dichloride manufacturing complex to Diamond Shamrock has been completed.

Goodyear expanded production from five to seven days a week at its Wolverhampton, England plant, primarily for radial truck tire production, adding 350 new workers.

Chem-Trend Inc., Howell, MI acquired the technology, manufacturing and sales rights of **GreenChem Products, Inc.**

Dayco Rubber Products opened a new Chicago area office to house operational, marketing and sales personnel for the company's new Coupled Hose Division.

Neville-Synthese Organics, Pittsburgh, PA signed a letter of intent with **Koppers Co.** to acquire their Oil City, PA facility which produces butylated hydroxy toluene (BHT) antioxidant, mono butyl metacresol and metacresol.

Chemseco opened a 60,000 sq. ft. plant in Pinckney, MI to house its manufacturing division, a research and development lab and warehouse for its adhesives and sealants.

NL Industries sold its Rucker Products division to **Amfac Distribution** for approximately $16 million.

Lauren Manufacturing, New Philadelphia, OH, a producer of silicone and organic closed and open-cell sponge and solid rubber extrusions established a Specialty Automotive Division.

MIR, Brescia, Italy has set up branches in France, USA and Venezuela for sales and service of its injection molding machines.

Chemcentral/Minnesota opened a 25,000 sq. ft. storage depot and warehouse for solvents and chemicals in Lakeville, MN.

Thermal Care/Mayer, Niles, IL increased manufacturing capacity by 10,000 sq. ft.

Biasius Industries sold certain assets of its Heil Grinding Division in Rochester, NY to a corporation headed by Heil president Frank Bryan.

3M Belgium N.V., S.A. announced it has set a target of mid-1986 for increased production of fluoroelastomers to begin at its chemical manufacturing plant in Antwerp. The plant addition will have world-scale facilities for fluoroelastomer polymerization, workup and final finishing, and will supply Europe and other markets outside the U.S.

Expansion and modernization at **Albion Kaolin's** slurry facility in Hephzibah, GA will facilitate the firm's controlled production of pure, high solids, low viscosity kaolin slurry.

Eagle Zinc, a division of **I.L. Diamond and Company**, now manages and operates the **Eagle Picher** zinc oxide plant located in Hillsboro, IL, producers of rubber quality zinc oxides.

RMA rubber report through September 1985 (figures in metric tons)

	Cumulative 1985	Cumulative 1984	% Change 85 vs 84
New Rubber			
New rubber available	2,287,726	2,448,379	-6.56
Imports	815,233	791,312	3.02
Exports	276,514	292,668	-5.52
Apparent Consumption	1,997,393	2,116,644	-5.63
Natural Rubber			
Imports	604,521	609,135	-.76
Exports	29,949	22,802	31.34
Apparent Consumption	585,975	582,926	.52
% Total new rubber	29.33	27.54	
Synthetic Rubber			
Production	1,472,493	1,657,067	-11.14
Imports	210,712	182,177	15.66
Exports	246,565	269,866	-8.63
Apparent Consumption	1,411,417	1,533,718	-7.97
% Total new rubber	70.66	72.45	
SBR			
Production	615,385	732,703	-16.01
Imports	73,992	54,875	34.84
Exports	63,002	81,721	-22.91
Apparent Consumption	642,394	686,417	-6.41
Nitrile			
Production	43,665	49,336	-11.49
Imports	8,859	8,686	1.99
Exports	4,995	5,896	-15.28
Apparent Consumption	46,256	49,851	-7.21
Polybutadiene			
Production	261,349	274,228	-4.70
Imports	53,429	51,052	4.66
Exports	18,767	17,499	7.25
Apparent Consumption	287,633	307,654	-6.51
Ethylene-Propylene			
Production	169,223	169,084	.08
Imports	725	738	-1.76
Exports	27,724	27,083	2.37
Apparent Consumption	136,897	130,815	4.65
Butyl, Polychloroprene, Polyisoprene, Silicone and other Synthetic Elastomers			
Production	382,871	431,716	-11.31
Imports	73,707	66,826	10.30
Exports	132,077	137,667	-4.06
Apparent Consumption	298,237	358,982	-16.92

Business Briefs

Contracts, licenses

Goodyear and the **Formosan Rubber Group Inc.** have formed a joint venture in Taiwan that will produce parts for the world's automotive and industrial markets with the primary product being V-belts.

Japan Butyl Co., a 50/50 joint venture between **Japan Synthetic Rubber** and **Exxon Chemical Eastern**, has completed construction of a halogenated butyl rubber plant at a site in the JSR Kashima plant with an annual capacity of 25,000 metric tons.

Whittaker Corp. and **Shinto Paint Co.**, Tokyo, have entered into an agreement whereby Shinto will manufacture and market Whittaker's Tinxon adhesives in Japan.

J.M. Starkel Co., Troy, MI, has been appointed manufacturers representative for **Fluorocarbon Co.'s** seven rubber group divisions.

Lauren Manufacturing appointed **Todd Stewart and Associates**, Southfield, MI as agents for its new specialty automotive division.

Adamson Chemical and **J.L.K. & Associates** have merged into Adamson Chemical and will represent on the eastern section of the U.S. the following companies: Arco Specialty Chemicals, Synpro Ware Dispersions, Durez Resins & Molding Materials, SerVaas Rubber, Resinall Corp., Hampford Chemicals and ACM Corp.

Wemhoner Anlagen, a German equipment manufacturer, appointed **Dieterich Enterprises**, Akron, OH as its representative for its line of automatic tread booking systems in the U.S.

Uniroyal selected **A-C Supply**, Milwaukee, WI to handle Uniroyal's Powergrip HTD synchronous belt line.

Plastic Service Centers have added **Georgia Gulf** PVC, **Du Pont's** Hytrel polyester elastomer and Texin urethane from **Mobay** along with the services of **Compounding Technology Inc.**, Costa Mesa, CA to its product and service offer.

Capitol Temptrol has appointed the following sales reps for its process liquid control equipment: **W.C. Neumann**, Canton, OH; **Abbott Equipment**, Golden, CO; **Process Engineering**, San Gabriel, CA; **American Plastic Equipment**, Pembroke Pines, FL for Latin America and **American Plastic Equipment**, Miami, FL for the Pacific area and Africa.

Bellofram Corp., Burlington, MA will sell the filter line of **Ultrafilter GmbH**, Dusseldorf, WG.

Carbon black industry in the U.S.A. (metric tons)

		1985 9 Months	Percentage Change 9 Months '85 vs. 9 Months '84
N-100 (SAF)	Prod.	21,468	+ 7.5%
	Ship.	21,117	+ 3.2%
N-200 (ISAF)	Prod.	100,339	(9.0%)
	Ship.	101,227	(7.0%)
N-300 (HAF)	Prod.	374,751	(11.1%)
	Ship.	376,593	(8.1%)
N-500 (FEF)	Prod.	73,769	(14.3%)
	Ship.	75,637	(9.5%)
N-600 (GPF)	Prod.	221,088	(11.4%)
	Ship.	219,666	(10.9%)
N-700 (SAF)	Prod.	82,942	(13.9%)
	Ship.	84,284	(11.4%)
Total	Prod.	874,356	(11.1%)
	Ship.	878,525	(8.9%)
Domestic Shipments (Included Above)		856,247	(9.5%)
Domestic Share		97.5%	

Financial statements

Armstrong Rubber reported net sales for the year of $767.8 million and net income of $16 million.

BASF Group reported earnings for the first quarter of 1985 of $804 million on sales of $10.7 billion.

Firestone reported a 1985 loss from continuing operations of $6 million. Sales totaled $3.8 billion.

Goodyear's third quarter earnings were $56.4 million on sales of $2.36 billion.

Hoechst Group reported worldwide profits before taxes for the first nine months of $770 million on sales of $10.6 billion.

NL Industries had third quarter net income of $5 million on sales of $360 million.

Markets, news

Production of furnace black in the U.S. in the third quarter of 1985 decreased 13% and shipments 6% from the like period of 1984 to 275 and 285 thousand metric tons respectively. Production was the lowest since the second quarter of 1983 and shipments improved slightly over the second quarter, according to Columbian Chemicals.

Year to date production of 874 MMT and shipments of 879 MMT decreased 11% and 9% respectively from the year earlier level. Demand in all grades was down except N-100, up 3%. Plant inventory reduced 10% during the quarter to 91 MMT, a four week supply.

U.S. dry rubber hydrocarbon consumption increased two percent over the second quarter but decreased three percent from the same period of 1984 to 605 thousand metric tons. SBR demand dropped to the lowest in 26 years.

For the first nine months, consumption of 1,868 MMT was 6% below the 1984 level. Both rubber ratios were lower; the synthetic share, from 72.5% to 70.7% and the carbon black, from 47.3 phr to 45.8 per hundred rubber, according to Columbian Chemical.

The International Institute of Synthetic Rubber Producers, Inc. (IISRP) announced that, although final 1985 figures are not yet available, it appears that rubber consumption in North America fell an estimated two percent from the 1984 level. Usage in 1986 is expected to remain at essentially the 1985 level.

Projections of rubber demand through 1990 show a compounded annual growth rate of 0.9 percent — considerably below most GNP projections for the period.

The Institute's Statistical Committee cited the increased penetration of imported tires, automobiles and rubber articles as the major factor in the 1985 decline in North American consumption. Synthetic rubber types used primarily in the tire industry, including styrene butadiene rubber and polybutadiene, reflected the sharpest usage decline. Ethylene-propylene rubber continued to grow, however, due to increased demand in singly-ply roofing and other non-tire applications. These uses are expected to keep demand growing through 1990.

The North American tire industry is expected to show little or no growth during the next five years because of the increased presence of imported tires and longer tire life. These are principal factors in the projections of flat to moderate growth through 1990. The proportion of total new rubber used in tires is projected to decline from 60.6 percent in 1985 to 59.6 percent in 1990.

The U.S. Department of Labor's Occupational Safety and Health Administration proposed reducing workplace permissible exposure levels (PELs) of benzene and formaldehyde. The proposed rules set a new limit for benzene of one part per million parts of air (1.0 ppm) averaged over eight hours — a reduction from the current 10 ppm — and an action level of 0.5 ppm. (Below the "action level" employers would not have to comply with monitoring, medical surveillance and other provisions of the standard.) OSHA is considering two possible permissible exposure limits for formaldehyde, 1.0 ppm or 1.5 ppm averaged over an eight hour workday, depending on results from findings on its link to cancer.

RMA tire shipments & production report through October 1985 (figures in thousands of units)

Passenger Tires	YTD 1985	YTD 1984	% Change
Shipments			
Original Equipment	46,619	42,892	+8.69
Radial	38,888	35,915	+8.28
Replacement	119,588	123,640	−3.28
Radial	96,625	93,146	+3.73
Export	4,060	5,005	−18.88
Radial	3,170	3,661	−13.41
Total	170,267	171,537	−0.74
Radial	138,683	132,722	+4.49
Production	138,338	146,265	−5.42
Radial	110,464	110,675	−0.19
Ending Inventory	—	—	—
Radial	—	—	—
Truck & Bus Tires			
Shipments			
Original Equipment	6,556	6,648	−1.38
Radial	4,131	3,456	+19.53
Replacement	26,894	26,718	+0.66
Radial	11,623	9,416	+23.44
Export	1,125	1,131	−0.53
Radial	602	519	+15.99
Total	34,575	34,497	+0.23
Radial	16,356	13,391	+22.14
Production	29,601	30,783	−3.84
Radial	13,525	11,612	+16.47
Ending Inventory	—	—	—
Radial	—	—	—

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